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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,542	01/23/2002	Wen-Hsiu Kuo	MR2349-783	3249

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ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER	
AMINZAY, SHAIMA Q	
ART UNIT	**PAPER NUMBER**
2674	2

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,542	KUO, WEN-HSIU	
	Examiner	Art Unit	
	Shaima Q. Aminzay	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Detailed Action

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinckley et al. U. S. Patent 2001/0,015,718 A1 (hereinafter '718)

3. Regarding claim 1, Hinckley discloses a mouse device with multimedia hotkeys (see Figures 4A-4C) described in last part of section of [0015], section [00135] and first part of Table 1, comprising: a mouse body 170 (Figures 4A and 4B); an input portion 170 and 174 (Figure 4A) for detecting movement of the mouse body (see, Figure 4B, trackball 190) and selecting computer functions by depressing the input portions as it is described in section [0098] (lines 11-12); a mouse motion tracking (Figure 4C, encoder 194, and 196; wheel 178 and encoder 203) mechanism for moving the mouse body ([0089] lines 1-15); a circuit board 200 for controlling operation of the mouse device (section [0098] lines 1-21); a periphery interface 182 for transmitting data processed by the circuit board

to a computer 20 (Figure 1) described in Figure-2 and section [0084] lines 1-4; the multimedia hotkey is mounted on the mouse (refer to section [0015] lines 4-7 and for example section [0092] lines 1-4);

Hinckley further teaches that the mouse with multimedia function as described above, can perform as hotkeys (see, section [0135], lines 4-6; Table 1, and Table 2; [0138], lines 1-14) by touching the sensitive buttons (smooth surface) on the mouse; as an example '718 describes in detail (see, sections [0075] lines 1- and [0079], and [008]) that by touching the mouse sensitive buttons, electrical signals are produce (section [0075], lines 1-11), these signals and the mouse trackball movements are encoded and processed by the microcontroller (120, Figure 2, or Figure 4C, 200), the "microcontroller produces an output 124, which is provided to serial port interface" (section [0084], lines 1-4 and lines 7-12); further, '718 describes alternative shapes and functions for the multimedia mouse (for example see, sections [0087] lines 1-16, [0090] lines 1-13, [0091] lines 1-13, and [0092] lines 1-4).

Hinckley does not teach that the multimedia hotkeys are depressible, they are sensor as opposed to being depressible key.

However, it is well known in the computer input device technology such as mouse that the touch-sensitive-button or mechanical push-button mouse can perform the same task when the major components and software functions of both input devices are the same.

It would have been obvious to one of ordinary skill in the art at the time

invention was made to utilize Hinckley's modification for the purpose of selecting the manner by which data is inputted, so that to be able to precisely locate each key on the mouse and therefore, provide accurate inputting of data, a versatile and user friendly device.

4. Regarding claim 2, Hinckley teaches in claim 1, above and further at least on general function key 176 (Figure 4A, section [0089], lines 8-10).

5. Regarding claim 3, Hinckley teaches in claim 1 above and further, teaches wheel 194 and 196 with axis (see for example, Figure 4C).

6. Regarding claim 4, Hinckley teaches in claim 1, above and further, teaches wheel ball 190 (Figure 4B) or optical lens and sensor, see for example see section [0007], lines 1-7.

7. Regarding claim 5, Hinckley teaches in claim 1 above and further, teaches the periphery interface (Figure 4A, and 4B, 182) is a serial type USB connector (see for example, section [0071] lines 10-16).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure
2. Hinckley et al. (U.S. Pat. 6,559,830 B1) Method of interacting with a computer using sensor in a computer input device
3. Perala (U.S Pat. 5,917,472) Cursor control system with multiple pointing device
4. Ryder (U. S. Pat. 2001/0038824 A1) Addition of mouse scrolling and hot-key function.

For Inquiry

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 703-305-8723. The examiner can normally be reached on 7:00-5:00.
   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH MANCUSO can be reached on 703-305-3885. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600